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WILD RICING IN MANITOBA



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WILD RICING IN MANITOBA

Introduction

Wild rice (*Zizania aquatica*) occurs naturally throughout the area surrounding the Upper Great Lakes. It is most common, however, in the pine and hardwood forests of southeastern Manitoba, northeastern Minnesota, northern Wisconsin and the areas of Ontario just north of Minnesota.

To many Canadians, wild rice is a luxury food because of its delicate flavour and high price, but to Native people of the rice-growing area, it has been a traditional mainstay of their diet. In 1888, approximately one-quarter of the food consumed by the Winnebago, Shish, Cass and Leech Lake Chippewa bands of Minnesota was wild rice. In the autumn, it also provides more than 50% of the food for wild ducks on some Minnesota lakes. A strategically located campsite on a lake with wild rice could provide Native people with more than one kind of highly nutritious food.

Wild rice is not really rice at all, but a member of the grass family. It is Manitoba's only *native* cereal -- other common cereals such as oats and corn cannot grow without a farmer's care. Wild rice grows naturally, usually in shallow water along the shores of lakes and streams, or near the inlets or outlets of lakes where the current is fairly steady.

In spring, wild rice seeds germinate in mud about a metre below the water's surface and send up long floating leaves. Stems soon appear and grow to a height of one or two metres above the surface. Flowering begins in August and, later that same month and throughout early September, the seeds ripen and almost immediately fall into the water. Because of this, much of the potential harvest is lost, but a large stand of wild rice can be reaped for up to three weeks. Each seed kernel is about two centimetres (1/2 inch) long and enclosed in a hull with a rough bristle at one end. The kernel is brown when harvested but turns darker after drying.

Distribution

Manitoba is particularly rich in this natural resource. In 1968, more wild rice was produced in Manitoba than the total exported by the rest of Canada. At certain times of the year, wild rice literally clogs the course of the La Salle River from Elie, near Portage La Prairie, to its junction with the Red River just south of Winnipeg. Other Manitoba sources include the Whitemud River at Westbourne,

Sturgeon Creek on Portage Avenue in Winnipeg, Cooks Creek near Gleason and the Brokenhead River near Beausejour. But wild rice is most common and economically important in southeastern Manitoba -- in the Whiteshell Provincial Park and along the east side of Lake Winnipeg nearly as far north as Norway House.

Antiquity

Despite its present abundance, wild rice has not always had widespread distribution. The climate of central North America was once much drier than it is today and wild rice was only found south of Manitoba. Then, about 2500 years ago, the climate became cooler and moister. Bogs began to form in many low areas in southern and central Manitoba, coniferous forests spread south and the Manitoba prairie retreated to the south and west. This favoured the growth of wild rice and it spread to Manitoba from the Great Lakes, changing the lives of the province's Native people.

Source

Carbonized kernels of wild rice from at least 2800 years ago have been found in archaeological sites in northern Michigan, showing that people living there at that time used the plant for food. However, botanical evidence from lakes in northern Minnesota suggests that wild rice did not grow there until 2000 years ago.

About that time, a group of people whose way of life is referred to by archaeologists as the "Laurel Culture" were gradually migrating north. The spread of an important food source such as wild rice could be a reason for it. They entered Manitoba from the south and east and quickly expanded throughout and beyond the modern range of wild rice. Although there is little direct evidence that the people of the Laurel Culture actually used wild rice, the plant could not have easily moved into Manitoba by itself. The seeds and pollen grains of wild rice are too heavy to be readily transported over long distances by wind or water. While seeds may have been carried here accidentally by birds or animals, people could have imported it as well.

There is direct evidence for Native use of wild rice in Manitoba by 1000 years ago. "Ricing pits" have been found from about this time. Dried rice was placed in a pit and the kernels were separated from the hulls by "dancing" on it. Hundreds of carbonized kernels from the 9th century have been found at an archaeological site on Wanipigow Lake near Bissett, Manitoba. This lake and others nearby still produce large amounts of wild rice.

However, many factors could spoil a harvest. The plant grows best in about one metre of water and sudden fluctuations in water levels during the growing season can cause severe crop losses. Various species of caterpillars, moths and other insects either feed on the plants or lay their eggs inside their flowering heads, where the hatching larvae feed. Fungal diseases, mainly smut and ergot, can kill the plant. Fish, particularly carp, occupy the shallow water that wild rice prefers and thrash about, dislodging plants. Muskrats are particularly fond of feeding on wild rice, as are many species of birds, principally red-winged blackbirds, sparrows and ducks.

Significance

Many Native people recognized how important wild rice was to them and protected the plant from some of its natural enemies. One of these methods was "bundling". Patches of rice of up to one metre in diameter would be tied together, which would not only protect the rice from pests, but would also reduce damage from high winds, rain and hail. These bundles also provided hawks with perches from which they could attack red-winged blackbirds feeding on the plants. This technique also allowed easier harvesting. Fewer grains would fall into the water and the passageways created through the bundles of rice would allow movement through the stand without damaging the plants.

The major drawback to this efficient harvesting technique was that it left fewer grains behind for natural reseeding. But The Ojibwa reseeded existing rice lakes and introduced the plant to lakes where it had not existed before.

It was common for rice harvesters to return a portion of their harvest to the rice beds so a good crop would grow the following year. One method of seeding both existing and "new" beds was to put seeds inside clay balls. The weight of the clay made sure that the seeds would go to the bottom and not be carried to an unfavourable location by the current. At the same time that seeding took place, people often removed weeds that might interfere with the rice's growth. Frequently, people also placed traps near wild rice to reduce damage from muskrats.

It is not clear when this type of management started. Most of these activities leave no traces for archaeologists, but Native legends suggest that many of them date from before the time of European contact in Manitoba.

Intentional planting and caring for an important wild crop is an early stage in the development of agriculture, an event in the cultural evolution of humans that ranks with

the invention of the wheel, the controlled use of fire and the birth of cities. Agriculture marks a change from a way of life where people passively accept what nature offers, to one where people make the environment work for them.

A domesticated plant is one that is completely dependent on people for successful planting and growth. It does not suddenly become domesticated, but gradually becomes dependent over a period of time -- sometimes thousands of years. Without influence from other cultures, Manitoba's Native people were involved in the first steps toward domestication of a wild plant in this area of the continent. Wild rice is capable of surviving without humans, but people helped it to become a successful species by protecting it and extending its range.

Some people claim that wild rice is the only food plant to be domesticated north of Mexico, where early corn, cotton and bean farmers provided an agricultural foundation for the Olmec, Maya and Aztec empires. Wild rice might have become increasingly important to the economy of local Natives, and become more dependent on people for its survival, if local Native lifestyles had not been disrupted by Europeans.

Domestication is a "two-way street". When people go to the trouble of domesticating a plant, they often become as dependent upon it as it is on them. Because of this, when a domesticated or partially domesticated crop fails, the results are much worse than the failure of a wild plant species. When wild rice failed in the past, observers such as explorer Henry Hind said that in various places in southeastern Manitoba the Ojibwa were "in utmost need", "reduced to hunting and begging" and "menaced with hunger and starvation".

Early explorers quickly realized how important wild rice was to the Native economy and its potential value for themselves. Alexander Henry the Elder stated in his *Travels* of 1775 that his northwest journey beyond the Saskatchewan River would not have been possible without the large supply of wild rice he obtained at Lake-of-the-Woods. Other explorers such as Benjamin Frobisher also depended on wild rice acquired from Native people. The fur traders who followed were as dependent for their success on local supplies of rice and other food as they were on furs provided by the Natives.

Known to the Ojibwa as "manomin", translated as "good berry" or "good fruit", the plant was harvested by teams of two people. One propelled a canoe through the rice fields while the other bent the stems into the boat and beat



The traditional method of harvesting wild rice.



Left: Boiling the rice to loosen the hulls. Right: Removing the hulls through the use of a "dancing" or "jigging" pit.



Winnowing the rice with the aid of birch bark baskets.

them with a stick, causing the grains to fall into the bottom. A team could harvest 200 kilograms in a day. Mechanical harvesters now exist that are much more efficient, but destroy the rice beds. From a conservation point of view, the old ways are still the best.

After a harvest, women spread the rice out to dry for a few days and then roasted it very slightly to loosen the hulls. The hulls were then separated from the kernels by beating the seeds with a flail, or by pouring the kernels into a pit where the men would "jig" or "dance" on them. The rice was then winnowed by throwing the rice into the air, where even a slight breeze was enough to carry away the hulls and leave the heavier kernels behind. It could then be prepared immediately, or safely stored for long periods of time.

As early as 1828 Timothy Flint advocated commercial exploitation of the plant. In his famous *Geography and History* he writes:

It is astonishing amidst all our eager and multiplied agricultural researches, that so little attention has been bestowed upon this interesting and valuable grain. It has scarcely been known, except by the Canadian hunters and [Natives] that such a grain, the resource of a vast extent of country, existed. It surely ought to be ascertained if the drowned lands of the Atlantic country will grow it. It is a mistake that it is found only in the northern regions of the Mississippi Valley.

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WILD RICING IN MANITOBA

Wild rice, or manomin to the Ojibwa, has been a staple food of local Native people for more than a thousand years. This tall grass spread slowly northwards from Minnesota and is now common in the shallow, still waters of many lakes and streams in the Whiteshell, and along the east side of Lake Winnipeg as far as Norway House.

Manomin ripens in September. In earlier days, harvesters would paddle into the rice stands, beat the stalks over the gunwales of their canoes and fill the canoes with grain in a few hours. During harvests, families involved in wild ricing congregated for festivities and religious ceremonies. Wild rice provided up to one-quarter of the diet of some Native groups. Abundant supplies of this nutritious grain, obtained from the Natives, sustained European traders and explorers on their travels into the western interior of Canada. Today, the harvesting of wild rice is still an important element of the local economy.

THE MANITOBA HERITAGE COUNCIL

PROVINCIAL COMMEMORATIVE PLAQUES PROGRAM

Manitoba's Provincial Commemorative Plaques Program honours those people, places and events which have contributed to the province's development. To date, more than 100 plaques have been erected.

Proposals to commemorate Manitoba's heritage resources come from many sources, including interested groups and individuals. After careful research by the Historic Resources Branch, proposals are submitted for recommendations to an advisory board composed of historians, archaeologists, architects, and others active in the heritage field. Those deemed to have provincial rather than local significance are forwarded to the Minister of Culture, Heritage and Recreation for final decision.

Plaques are usually located at sites associated with the people, places or events being honoured.